No.



200100226

<u> AHIB UNIAFED SHAVIES OF AMERICA</u>

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Enza Zaden Reheer B.A.

ILCCCES, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR RITING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROPAGATION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Coastal Star'

In Testimony Thereof, I have hereunto set my hand and caused the seal of the Hant Mariety Protection Office to be affixed at the City of Washington, D.C. this twenty-sixth day of July, in the year two thousand and five.

Allost:

Benzo

Commissioner Plant Variety Protection Office Saricultural Marketina Servici Agriculture

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE ENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFIC

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

SCIENCE AND TECHNOLOGY	' - PLANT VARIETY PROTECTION	OFFICE		1	reduction Act (F704) of 1880.		
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)				Application is req (7 U.S.C. 2421).	uired in order to determine if a pi Information is held confidential u	ant variety pr ntil certificate	otection certificate is to be issued is issued (7 U.S.C. 2426).
1. NAME OF OWNER ENZA ZADEN - E	Beneer e Enkhulzer Zaad	thandet	BV.	840 519105	2. TEMPORARY DESIGNATI EXPERIMENTAL NAME Exp. R2776	ON OR	3. VARIETY NAME Coastal Star
4. ADDRESS (Street and No., or R.F.D. No.,	City, State, and ZIP Code, and Cou	intry)			5. TELEPHONE (Include area	code)	FOR OFFICIAL USE ONLY
Postbus 7, 16	OO AA ENKHUIZEN				USA: 831 623-4		PVPO NUMBER
Haling le, 16	02 DB ENKHUIZEN				NL: +31 228-31	5844	TO HOMBER
The Netherlan	ds				6. FAX (include area code) iUSA: 831 623-1 NL: +31 228-31	746	700100226
					NL: +31 220-31	2034	FILING DATE
 IF THE OWNER NAMED IS NOT A "PERSO ORGANIZATION (corporation, partnership, 	DN", GIVE FORM OF association, etc.)	8. IF INCO	ORPORATI OF INCOR	ED, GIVE RPORATION	9. DATE OF INCORPORATION	on [July 23,2001
corporation		H	lollar	nd	1938		<u> </u>
10. NAME AND ADDRESS OF OWNER REPR	RESENTATIVE(S) TO SERVE IN T	HIS APPLICATI	ION. (First	person listed will re	ceive all papers)		FILING AND EXAMINATION FEES:
Mel Holland			•			ļ.	.
P.O. Box 866	!-!- @ OFO45					ES	
San Juan Baut	ista, CA 95045					R	DATE July 23,20
						ĝ	CERTIFICATION FEE:
						¥	1,432-
						Ē	100
							DATE May 10,20
11. TELEPHONE (Include area code)	12. FAX (include area code)		13. E-MA			14. CROP	KIND (Common Name)
831 623–4644	831 623–1746		mhc	ollan 2@iz	x.netcom.com	Let	tuce
15. GENUS AND SPECIES NAME OF CROP			16. FAM	IILY NAME (Botanic	al)	17. IS THE	VARIETY A FIRST GENERATION
Lactuca sativa			Co	ompositae □ YES ဩ NO			
18. CHECK APPROPRIATE BOX FOR EACH reverse)	ATTACHMENT SUBMITTED (Folio	ow instructions o	on	19. DOES THE C	OWNER SPECIFY THAT SEED (SEED? See Section 83(e) of	F THIS VAR	ETY BE SOLD AS A CLASS OF iety Protection Act)
a. 🔀 Exhibit A. Origin and Breeding i	History of the Variety				YES (If "yes", answer items 20 and 21 below)	ŗ	
b. Exhibit B. Statement of Distinct					······································		
c. Exhibit C. Objective Description d. Exhibit O. Additional Description	•			20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?			
e. 🔀 Exhibit E. Statement of the Bas				IF YES, WHIC	CH CLASSES? FOUND	TION 🔲	REGISTERED CERTIFIED
***	intreated seeds or, for tuber propag Il be deposited and maintained in a	pated varieties, a annoved out	ule.	21. DOES THE C	WNER SPECIFY THAT SEED (F THIS	☐ YES 🔂 NO
repository)				VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?			
g. Filing and Examination Fee (\$2, States" (Mail to the Plant Variet)	705), made payable to "Treasurer o Protection Office)	or the United	ļ	NUMBER 1,2			REGISTERED CERTIFIED
·				(If additional o	explanation is necessary, please	use the spac	e indicated on the reverse.)
22. HAS THE VARIETY (INCLUDING ANY HA FROM THIS VARIETY BEEN SOLD, DISP OTHER COUNTRIES?	RVESTED MATERIAL) OR A HYBI OSED OF, TRANSFERRED, OR U	RID PRODUCE SED IN THE U.	S. OR	23. IS THE VARI PROPERTY	ETY OR ANY COMPONENT OF RIGHT (PLANT BREEDER'S RIC	THE VARIET	Y PROTECTED BY INTELLECTUAL ENT)?
X YES	□ ио			_	res .		Σi νο
IF YES, YOU MUST PROVIDE THE DATE FOR EACH COUNTRY AND THE CIRCUI	OF FIRST SALE, DISPOSITION, MSTANCES. (Please use space in	TRANSFER, OI dicated on reve	R USE rse.)	IF YES, PLEA REFERENCE	SE GIVE COUNTRY, DATE OF NUMBER. (Please use space in	FILING OR IS adicated on re	SSUANCE AND ASSIGNED IVEISE.)
24. The owners declare that a viable sample of for a tuber propagated variety a tissue culture.	f basic seed of the variety will be fu are will be deposited in a public rec	rnished with appository and ma	plication ar	nd will be replenished for the duration of the	ed upon request in accordance w	ith such regu	ations as may be applicable, or
The undersigned owner(s) is(are) the owner and is entitled to protection under the provi							
Owner(s) is(are) informed that false repres							
SIGNATURE OF OWNER				SIGNATURE OF	OWNER		
ENZA ZADEN, De Enkhu		BV					
NAME (Please print or type)	U		,	NAME (Please pr	int or type)		
by, Donald G Be	Enkhuizer Zaadha rgam	ruaet B/	/	- LIVING BATTER			
CAPACITY OR TITLE	DATE			CAPACITY OR TI	TLE		DATE
Plant Breeder	7/	18/2001	L į				<u> </u>

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form stands by the current (2) completed application form stands by the current (2) completed application form stands by the current (2) completed application form stands by the current (3) completed application forms are current (3) completed application (4) application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;

(3) evidence of uniformity and stability; and

- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively:
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested meterial) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

U.S.A. July 23, 2000

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filling a change of address. The fee for filling a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/is-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for review instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact or ramey status. (IVOX as pronunced bases apply to as programs.) Persons with disabstaces who require alternative means for communication of program information (Braffle, large print, audiotape, etc.) should contait USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 328-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or cell (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Reptaces STD-470 (02-99) which is obsolete.

Exhibit A

Origin and Breeding History of the Variety

Lettuce: "Coastal Star"

Coastal Star originated from a cross made in 1996 between the romaine lettuce cultivars Darkland and Medallion. Darkland (female parent) is a large sized, earlier cupping, corky root susceptible line. Medallion (male parent) is a medium sized, slow cupping cultivar with corky root resistance and lettuce mosaic virus resistance. The pedigree method of plant breeding employing single plant and mass selection was used in developing Coastal Star. Screening for corky root resistance was utilized in combination with the selection process.

The selection criteria, disease screening and seed multiplication involved in the development of Coastal Star are as follows:

1. Cross made and F_1 plants grown in the greenhouse to produce F_2 seed.

suberifaciens

Rhizomonas 2. F₂ generation screened for corky root resistance. Eight of the more vigorous, resistant plants were selected, grown in the greenhouse and the resulting F₃ seed collected.

- 3. F₃ generation grown on Coastal Seeds' trial grounds located in the San Juan Bautista, California, area. Segregation was observed for plant size, height and cupping. Three single plant selections were made based on larger size and taller plant habit. The selections were designated 3x1201ms1-1A to C.
- 4. F₄ generation seed collected from 3x1201ms1-1A to C was screened for corky root and the selections found to be resistant. Two selections with superior plant vigor were made in the line designated as 3x1201ms1-1A1 and 2, transplanted to the greenhouse and the resulting F_5 seed collected.

5. F₅ generation. The two selections, 3x1201ms1-1A1 and 2, were evaluated in test plots on the company trial grounds. Selection 3x1201ms1-1A2 was uniform for type with taller plant habit and larger size than Medallion or Darkland. A mass selection of sixteen plants from 3x1201ms1-1A2 was transplanted to a screenhouse to produce

Cos

- a seed increase for trial evaluation and foundation seed. The seed increase for trial evaluation and foundation seed. The seed increase for trial evaluation and foundation seed. The seed increase for trial evaluation and foundation seed. The seed increase for trial evaluation was screened for corky root disease with inoculum of the plant Pathology Department, University of California at Davis and tested 100% resistant. In extensive trial and field planting in the lettuce growing areas of California, Exp. R2776 was uniform and stable for type. No variants were R2776 to the disease.
- 7. A seed increase of Coastal Star using Exp. R2776 for stock seed was made in Australia during the 1999-2000 production season. Trial and field plantings demonstrated that Coastal Star was uniform and stable. No variants were observed.

- Disease screening and plantings on corky root infested ground confirmed that Coastal Star was uniform and stable for corky root resistance.
- 8. In 2000 a seed increase was grown in California using the Australian production for stock seed. Subsequent trial and field plantings demonstrated that Coastal Star had remained uniform and stable for type with no observed variants. Disease screening and plantings on corky root infested ground demonstrated that Coastal Star had retained its uniformity and stability for corky resistance through the third generation of reproduction.

Coastal Star can be distinguished from the parent cultivars as follows:

- 1. <u>Medallion:</u> Coastal Star has a taller plant habit, greater head weight and longer cores compared to Medallion. Coastal Star is lettuce mosaic virus susceptible while Medallion is lettuce mosaic virus resistant.
- 2. <u>Darkland</u>: Coastal Star is corky root resistant. Darkland is corky root susceptible. Grown on soil infested with corky root disease, Coastal Star has a taller plant habit, greater head weight and longer core compared to Darkland.

Coastal Star has been evaluated in extensive trials and field plantings in the lettuce growing areas of California. Coastal Star has been observed to be uniform and stable from the F_5 through three generations of reproduction. No variants have been observed. Coastal Star has been uniform and stable for corky root resistance from the F_4 through three generations of reproduction.

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Exhibit B

Statement of Distinctness

Lettuce: "Coastal Star"

Coastal Star is most similar to Medallion. Coastal Star differs from Medallion in having taller plant habit (34 cm. vs. 30 cm.), greater head weight (842 g. vs. 742 g.) and longer core (73 mm. vs. 59 mm.). Coastal Star is lettuce mosaic virus susceptible whereas Medallion is lettuce mosaic virus resistant.

Coastal Star differs from the parent variety, Darkland, in its resistance to corky root disease. Coastal Star is resistant whereas Darkland is susceptible. Grown in corky root infested soil, Coastal Star differs from Darkland in having taller plant habit (34 cm. vs. 29 cm.), greater head weight (842 g. vs. 688 g.) and longer core (73 mm. vs. 55 mm.)

RAD 4/11/05

Exhibit B: Coastal Star

PVP Trial #1

C&G Farms in Chular, California on August 20, 2000

Variety Effects on Head Height

Coastal Star Medallion Darkland Cos TotalCount 96 96 96 Sum 3148.5 2777.5 2787.5 32.796875 28.93229 29.03646 Average Variance 2.381990132 2.008525 2.396025

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	66.51649306	3	22.17216	11.24158	5.56E-07	2.637307
Varieties	930.7708333	2	465.3854	235.9565	1.79E-60	3.028489
Interaction	33.84027778	6	5.640046	2.859578	0.010187	2.1315
Within	544.3645833	276	1.972335			
Total	1575.492188	287				

Two way Comparison: Head Height

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	3148.5	2777.5	
Average	32.796875	28.93229	
Variance	2.381990132	2.008525	

ANOVA

<u>-</u>						
Source of Variation	SS	df	MS	F	P-value	F crit
Reps	56.35416667	3	18.78472	9.937506	4.19E-06	2.653692
Varieties	716.8802083	1	716.8802	379.2444	1.42E-46	3.892495
Interaction	12.93229167	3	4.310764	2.280483	0.080824	2.653692
Within	347.8125	184	1.890285			
Tr - 4-1	1122 070177	101				
Total	1133.979167	191				

Two way Comparison: Head Height

Coastal Star vs. Darkland (05

™(_ <i>0</i> 5		<i>A</i> *	
∧ Total	Coastal Star	Darkland 🕒 🗲	
Count	96	96	_
Sum	3148.5	2787.5	
Average	32.796875	29.03646	
Variance	2.381990132	2.396025	

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	50.29166667	3	16.76389	8.069912	4.43E-05	2.653692
Varieties	678.7552083	1	678.7552	326.7437	1.18E-42	3.892495
Interaction	21.390625	3	7.130208	3.432387	0.018176	2.653692
Within	382.2291667	184	2.077332			
Total	1132.666667	191				

12/1/05

PVP Trial #2 D.J Enterprises

Salinas, California on June 15, 2001

Variety Effects on Head Height

Darkland (1) S Coastal Star Medallion Count 96 96 96 2993.5 2803 Sum 3307.5 Average 34.45313 31.18229 29.19792 Variance 3.489885 7.142736 3.476206

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	177.0625	3	59.02083	17.25799545 2	.67372E-10	2.637307
Varieties	1352.106	2	676.053	197.6813627	5.3132E-54	3.028489
Interaction	219.3802	6	36.56337	10.691317021	.09977E-10	2.1315
Within	943.8958	276	3.419912			
Total	2692.444	287				

Two way Comparison: Head Height

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	3307.5	2993.5	
Average	34.45313	31.18229	
Variance	3.489885	7.142736	

ANOVA

ce of Variation						
	SS	df	MS	F	P-value	F crit
Reps	140.151	3	46.71701	13.034834999	.31202E-08	2.653692
Varieties	513.5208	1	513.5208	143.28097558	.62756E-25	3.892495
Interaction	210.4896	3	70.16319	19.5767149	4.6493E-11	2.653692
Within	659.4583	184	3.584013			
Total	1523.62	191				

Two way Comparison: Head Height

Coastal Star vs. Darkland COS

Л	_Total	Coastal Star	Darkland (205	
	Count	96	96	
	Sum	3307.5	2803	
	Average	34.45313	29.19792	
	Variance	3.489885	3.476206	

ANOVA Source of Variation P-value SS df MS F crit Reps 15.92057 3 5.306858 1.612958916 3.187894705 2.653692 Varieties 1325.626 1 1325.626 402.90901113.19368E-48 3.892495 13.49089 4.100400915 0.007593053 Interaction 40.47266 3 2.653692 Within 605.3854 3.290138 184 1987.405 191 Total

RAD ulilos

PVP Trial #1

C&G Farms in Chular, California on August 20, 2000

Variety Effects on Head Weight

Weight			,,,,,,
Total	Coastal Star	Medallion	Darkland (05
Count	96	96	96
Sum	81061.5	70587.5	68279
Average	844.390625	735.2864583	711.239583
Variance	15539.14317	11170.0776	12938.5315

ANOVA

71110 171						
Source of Variation	SS	df	MS	F	P-value	F crit
Reps	392421.25	3	130807.0833	11.56937	3.63E-07	2.6373072
Varieties	966757.4809	2	483378.7405	42.75294	6.69E-17	3.0284894
Interaction	253568.8594	6	42261.47656	3.737861	0.001362	2.131500
Within	3120546.354	276	11306.32737			
T-4-1	4722202 044	207				
Total	4733293.944	287				

Two way Comparison: Head Weight

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	81061.5	70587.5	
Average	844.390625	735.2864583	
Variance	15539.14317	11170.0776	

ANOVA

Source of Variation	n SS	df	MS	F	P-value	F crit
Reps	530780.8073	3	176926.9358	16.51337	152E-09	2.6536923
Varieties	571378.5208	1	571378.5208	53.32929	8.25E-12	3.8924952
Interaction	35189.6875	3	11729.89583	1.094803	0.352649	2.6536923
Within	1971405.479	184	10714.16021			
Total	3108754.495	191				

Two way Comparison: Head Weight

Coastal Star vs. Darkland Cos

. Darkland $C\iota$	95			,	3	fAD!	4/11/05
	Total		Coastal Star	Darkland (0S	F-HD	*
	Count	•	96	96			
	Sum		81061.5	68279			
	Average		844.390625	711.2395833			
	Variance		15539.14317	12938.53147			
ANOVA							_
e of Variation	SS	df	MS	F	P-value	F crit	_
Reps	221215.9206	3	73738.64019	6.062883	0.000587	2.6536923	
Varieties	851001.5951	1	851001.5951	69.97041	1.47E-14	3.8924952	

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	221215.9206	3	73738.64019	6.062883	0.000587	2.6536923
Varieties	851001.5951	1	851001.5951	69.97041	1.47E-14	3.8924952
Interaction	246298.681	3	82099.56033	6.750328	0.000241	2.6536923
Within	2237864.49	184	12162.30701			
Total	3556380.686	191				

PAP 4/11/05

PVP Trial #2 D.J. Enterprises

Salinas, California on June 15, 2001

Variety Effects on Head Weight

prises	Salinas, California on Ju	une 15, 2001		٠ - ١
Weight	G . 10.	3.6 1 77:		pap 4/11/05
Total	Coastal Star	Medallion .	Darkland CoS	>
Count	96	96	96	
Sum	80508.5	71851	63801.5	
Average	838.6302	748.4479	664.599	
Variance	13931.13	19120.36	10630.51	

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	36808.95	3	12269.65	0.83827	0.473855	2.637307
Varieties	1454412	2	727205.9	49.68329	3.72E-19	3.028489
Interaction	73215.99	6	12202.66	0.833696	0.54469	2.1315
Within	4039765	276	14636.83			
Total	5604202	287				

Two way Comparison: Head Weight

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	80508.5	71851	
Average	838.6302	748.4479	
Variance	13931.13	19120.36	

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	73168.61	3	24389.54	1.472672	0.223469	2.653692
Varieties	390376.6	1	390376.6	23.57145	2.56E-06	3.892495
Interaction	19421.76	3	6473.921	0.390904	0.759689	2.653692
Within	3047301	184	16561.42			
Total	3530268	191				

Two way Comparison: Head Weight

Coastal Star vs. Darkland (05

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i

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	3610.865	3	1203.622	0.096143	0.962087	2.653692
Varieties	1453770	1	1453770	116.1242	2.65E-21	3.892495
Interaction	26231.36	3	8743.786	0.698436	0.554119	2.6536.92
Within	2303514	184	12519.1			
Total	3787126	191				

PAD 4/11/05

PVP Trial #1 C&G Farms in Chular, California on August 20, 2000

Variety Effects on Core Length

		7"
oastal Star	Medallion	Darkland (1)
96	96	96
8206	6350	6086
85.47917	66.14583	63.39583
85.57851	69.57851	59.35746
	96 8206 85.47917	8206 6350 85.47917 66.14583

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	178.1528	3	59.38426	0.819506	0.484018	2.637307
Varieties	27808.44	2	13904.22	191.8791	5.89E-53	3.028489
Interaction	200.8056	6	33.46759	0.461855	0.836243	2.1315
Within	19999.92	276	72.46347			
Total	48187.32	287				

Two way Comparison: Core Length

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	8206	6350	
Average	85.47917	66.14583	
Variance	85.57851	69.57851	

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	203.625	3	67.875	0.868578	0.458461	2.653692
Varieties	17941.33	1	17941.33	229.5905	3.42E-34	3.892495
Interaction	157.625	3	52.54167	0.672362	0.570014	2.653692
Within	14378.67	184	78.14493			
Total	32681.25	191				

Two way Comparison: Core Length

Coastal Star vs. Darkland CoS

Total	Coastal Star	Darkland CoS	
Count	96	96	
Sum	8206	6086	
Average	85.47917	63.39583	
Variance	85.57851	59.35746	

ANOVA

Sourc	e of Variation	SS	df	MS	F	P-value	F crit
	Reps	220.0417	3	73.34722	1.003847	0.392358	2.653692
	Varieties	23408.33	1	23408.33	320.3719	3.77E-42	3.892495
	Interaction	104.7083	3	34.90278	0.477688	0.698196	2.653692
	Within	13444.17	184	73.06612			
	Total	37177.25	191				

12AD 4/11/05

RAD 4/11/05

PAD 4/11/05

Exhibit B: Coastal Star

PVP Trial #2 D.J.Enterprises

Salinas, California on June 15, 2001

Variety Effects on Core Length

Darkland COS Coastal Star Medallion 96 Count 96 5862 5063 4393 Sum 61.0625 52.73958 45.76042 Average 58.56305 Variance 117.8276 96.57357

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	197.2639	3	65.75463	0.717574	0.542214	2.63730726
Varieties	11268.27	2	5634.135	61.48476	8.24E-23	3.02848946
Interaction	443.1736	6	73.86227	0.806052	0.565921	2.13150031
Within	25291.17	276	91.63466			
Total	37199.88	287				

Two way Comparison: Core Length

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	5862	5063	
Average	61.0625	52.73958	
Variance	117.8276	96.57357	

ANOVA

Source of Variation	SS	df	MS	F	P-value F	crit
Reps	76.55729	3	25.5191	0.234502	0.872247 2.6536	9238
Varieties	3325.005	1	3325.005	30.55434	1.1E-07 3.8924	9522
Interaction	268.1823	- 3	89.3941	0.821466	0.483539 2.6536	9238
Within	20023.38	184	108.8227			
Total	23693.12	191				

Two way Comparison: Core Length

Coastal Star vs. Darkland

Star vs. Darkland 🛴	9				_	Ma.	~ 1.1.1.1.c
	Total		Coastal Star	Darkland (05	RHY) 4/11/09
!	Count		96	96		•	•
	Sum		5862	4393			
	Average		61.0625	45.76042			
	Variance		1178276	58.56305			
ANOVA							
Source of Variation	SS	df	MS	F	P-value	F crit	
Reps	231.5156	3	77.17188	0.865389	0.460125	2.65369238	
Varieties	11239.38	1	11239.38	126.036	1.3E-22	3.89249522	
Interaction	117.224	3	39.07465	0.438175	0.725954	2.65369238	
Within	16408.38	184	89.17595			•	
Total	27996.49	191					

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION OBJECTIVE DESCRIPTION OF VARIETY

0	مده	519105		Lactuca sativa		
HAME	PAP	<u> </u>	<i></i>		FOR OFFICIAL U	SE ONLY
	E	PLICANT (5) Beh NZA ZADEN, De Enkh	uizer Zaadhandel I	∃V,	PVPO NUMBER	
ADDRES	55 (St	reet and No. or R.F.D. No., C.	ity, State, and ZIP Code)	. •	2001007	126
		ostbus 7 , 1600 AA			VARIETY NAME	
		aling le., 1602 DB	ENKUIZEN	:		
	Т	he Netherlands			EXPERIMENTAL DESIGNA	TION
						
Place nu	mberi	in the boxes for the character	rs which best describe this var	iety. Measured data should be the	mean of an appropriate number	er (at least 10) of wel
spaced p	lants.	Royal Horticultural Society	or any recognized color standa	ard may be used to determine plant	colors.	,
The loca		f the test area is:		Color System Used:	turn Cogioty Colo	ur Chart
	S	an Juan Bautista,	CA,	ROYAL HOLLICUL	tural Society Colo	our chare
1. PLAN	IT TY	PE: (See list of suggested	f check variaties page 4.)			
		01=Cutting/Leaf	05-Great Lakes Gro			
() 4	02=Butterhead 03=Bibb	06=Vanguard Group 07=Imperial Group	10=Latin 11=OTHER	* **	
-		04=Cos or Romaine			-	
2. SEED	:	COLOR	LIGHT DORMA	NCY HEAT DO	RMANCY	
	13	1=White (Silver Gray) 2=Black (Gray Brown)	1=Light Require	1 1 2 No. C.		
	1.	3=Brown (Amber)	2- Clark 140f ME			dia a
3. COTY	LED	ON TO FOURTH LEAF STA	GE: NOTE: Provide a color grown under op	photograph or photocopy of the fortimal conditions.	ontto less stom 20 gay old see	oing
	2	SHAPE OF COTYLEDONS:	1=Broad 2=in	termediate 3=Spatulate	9	
		<u> </u>				
					\wedge	
	[4	SHAPE OF FOURTH LEAF	:			•
					11 415	•
				\)
)
		/) () \ / [11 21/	:
				(1/ 5/2	
				A, ,		
		1	2 3	4	5 6	San San San San San San San
WOV OV			2 3		•	
131						
ا /د		LENGTH/WIDTH INDEX OF	FOURTH LEAF: L/W x 10	(information pending	a)	
L_1				· · · · · · · · · · · · · · · · · · ·		
	1	APICAL MARGIN:	1=Entire	4=Moderately Dentate	7=Lobed	
		}	2=Creanate/Griawed	5=Coarsely Dentate	8=OTHER (specify)	
1, 4 : 44	4	BASAL MARGIN:	3=Finely Dentate	6=Incised		
	1	UNDULATION:	1=Flat	2=Slight	3=Medium	4=Marked
		GREEN COLOR:	1=Yellow Green	3-Medium Green	5-Blue Green	7=Gray Green
	4	GREEN COLOX.	2=Light Green	4-Dark Green	6=Silver Green	
		ANTHOCYANIN:			E OTHER /	; -
		DISTRIBUTION:	1=Absent	3=Spotted	5-OTHER (specify)	
	$\lfloor 1 \rfloor$	the second of	2=Margin Only	4-Throughout		
	1	CONCENTRATION:	1=Light	2=Moderate	3=Intense	•
	<u></u>]					
		ROLLING:	1-Absent	2-Present	•	
;				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
	2	CUPPING:	1=Uncupped	2=Slight	3-Markedly	
	——————————————————————————————————————			2- Ani M'-	2nd agencyl Margins	
	1	REFLEXING:	1=None	2=Apical Margin	3-Lateral Margins	

		MARGIN:	sture leaves which accurately shows color a		
	[2	INCISION DEPTH: Ideepest penetration of t	1=Absent/Shallow (Dark Green Boston) the margin/	2=Moderate (Vanguard)	3*Deep (Great Lakes 659)
	2	INDENTATION: (finest divisions of the margi	1=Entire (Dark Green Boston) 2=Shallowly Dentate (Great Lakes 65)	3-Defply Dentate (Great Lakes 659) 4-Crenate (Vanguard)	5-OTHER (specify)
	2	UNDULATION OF THE APICAL MARGIN:	E 1#Absent/Slight (Dark Green Boston)	2-Moderate (Vanguard)	3=Strong (Great Lakes 659
	5	GREEN COLOR:	1=Very Light Green (Bibb) 2=Light Green (Minetto)	3-Medium Green (Great Lakes) 4-Dark Green (Vanguard)	5-Very Dark Green 6-OTHER
		ANTHOCYANIN (grown at a	or below 10 C):		
	1	DISTRIBUTION:	1-Absent 2-Margin Only (Big Boston)	3-Spotted (Calif, Cream Butter) 4-Throughout (Prize Head)	5-OTHER (specify)
	/	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
•	3	SIZE:	1~Small	2=Medium	3=Large
	2	GLOSSINESS:	1=Dull (Vanguard)	2-Moderate (Salinas)	3=Glossy (Great Lakes)
٠	2	BLISTERING:	1∞Absent/Slight (Salinas)	2=Moderate (Vanguard)	3≈Strong (Prize Head)
	2	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
	1	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	
5. PL	ANT (at market stage. Choose a compa	rison variety appropriate for this type.):		
. [///	SPREAD OF FRAME LEAVES	5:	(specify comparison variet	y) .
<u></u>		HEAD DIAMETER (market to			
	//	cm This Variety	cm	(specify comparison variet	y)
	6	HEAD SHAPE:	1=Flattened 2=Slightly Flattened	3*Spherical 4-Elongate	5-Non-Heading 6-OTHER Romaine
•		HEAD SIZE CLASS:	1=Small	2-Medium	3=Large
	2 4	HEAD COUNT PER CARTON			
8	1 2	HEAD WEIGHT: g This Variety	742 g Medallion	(specify comparison variety	n Viji
		HEAD FIRMNESS:	1=Loose 2=Moderate	3=Firm 4=Very Firm	· 12
6. BU	IT (bo	ttom of market-trimmed head):			in the second
	/	SHAPE:	1=Slightly Concave	2-Flat	3=Rounded
	2	MIDRIB:	1=Flattened (Salinas)	2-Moderately Raised	3=Prominently Raised (Great Lakes 659)
7. COR	E (ster	n of market-trimmed head):			4
3	5	mm Diameter at base of head		•	
//		Ratio of head diameter/core dia	meter		
7	3	Core height from base of head to mm. This Variety	5 9 mm Medallion	. (specify comparison variety)
BOL	TING	(Give First Water Date 6-30-	00 J: NOTE: First Water Date is t	ne date seed first receives adequate moi ften does equal the planting date.	
0 7	2	Number of days from First Wate This Variety	er Date to seed stalk emergence fourmer c 0 7 5 Medallion	onditions): [specify comparison variety	,
	4		,	3=Medium 4=Rapid	5-Very Rapid
1 3	2	Height of mature seed stalk: cm. This Variety	109 cm Green Towers	(specify comparison variety	,
					

Spread of Bolter Plant (at wild	dest point):	Green Towers (apacify of	
4 1 cm This Variety	4 4 cm	31een lowers (apacity)	comparison variety)
BOLTER LEAVES:	1=Straight	2=Curved	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 MARGIN:	1 = Entire	2=Dentate	
3 COLOR:	1- Light Green	2-Medium Green	3×Dark Green
BOLTER HABIT:			
TERMINAL INFLORESCENCE:	1=Absent	2=Present	
LATERAL SHOOTS: (above head)	1=Absent	2-Present	
BASAL SIDE SHOOTS:	1=Absent	2=Present	
9. MATURITY fearliness of harvest-mature he	ead formation):		
NOTE: Complete this section for at least	st one season.		
SEASON Applic. 1 #of days	Check ! #of days	CHECK	VARIETY 2/
Spring 8 2	8 5	Darkland Cos	
Summer 6 2	66	Darkland Cos	
Fall 6 4	67	Darkland Cos	
Winter		The state of the s	
Give planting date(s), and location(s):			· · · · · · · · · · · · · · · · · · ·
Spring February 9, 20	00 San Juan E	Bautista, CA	
7 20 2000		Bautista, CA	
Fall August 15, 200	0 San Juan E	Bautista, CA	
Winter			
1/ First water date to harvest.	2/ Fill in check varie	ety name on the appropriate line.	
IO. ADAPTATION: PRIMARY REGIONS OF ADA	NPTION (tested and prove	en adapted): (0=Not tested	1=Not Adapted 2=Adapted)
	,		
Southwest (Calif., Ariz. desert)	2 West Coas	Northeast	
0 Northcentral	O Southeast	OTHER	
SEASON: 2 Spring (area West Co	ast/Southwest	2 Fall (area West Co	past
	Coast ,	2 Winter (area South	west
0 GREENHOUSE:	0-Not tested	1=Not Adapted	2×Adapted
	1-Mineral	2=Organic	3-Both
ORM LS-470-1			Page 3 of

FORM LS-470-(9-86)

	VIPITE	^	FUNGAL/BACTERIAL	
•	<u>VIRUS</u> O Big Vein	2AV	A Corty Boot Bot (Pything Boot Bot)	.0 .
	1 Lettuce Mosaic	2AC	G A Corky Root Rot Pythium Root Rot Sul	peritac
•	O Cucumber Moseic	4111	Powdery Mildew	CA -I
	O Broad Bean Wilt			
•	O Turnip Mossic			
	O Beet Western Yellows			
•	O Lett. Infectious Yellows		ОТНЕЯ	
	Other Virus			
	INSECTS		PHYSIOLOGICALISTRESS	
	O Cabbage Loopers		5 Tipbum 0 Salt	
	0 Root Aphids		5 Heat 0 Brown Rib (Rib Discolor	ation, Rib Bligh
	1 Green Peach Aphid		O Drought OTHER	
	Other Insect		O Cold	
	Other Insect			
		POST HARVE	<u>sr</u>	/ Streak)
	OPlak Rib	POST HARVE	O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	/ Streak)
я	O Pink Rib O Russet Spotting	POST HARVE	<u>sr</u>	y Streak)
a .	OPlak Rib	POST HARVE	O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	/ Streak)
	O Pink Rib O Russet Spotting		O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	/ Streak)
	O Plink Rib O Russet Spotting O Rusty Brown Discoloration		O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	y Streak)
·	O Plink Rib O Russet Spotting O Rusty Brown Discoloration		O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	y Streak)
·	O Plink Rib O Russet Spotting O Rusty Brown Discoloration		O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	r Streak)
2. BIOCHEMICAL	O Plink Rib O Russet Spotting O Rusty Brown Discoloration		O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	/ Streak)
Z. BIOCHEMICAL	O Plink Rib O Russet Spotting O Rusty Brown Discoloration		O Internal Rib Necrosis (Blackheart, Gray Rib, Gra	/ Streak)
Z. BIOCHEMICAL	OPINK Rib ORusset Spotting ORusty Brown Discoloration OR ELECTROPHORETIC MARKERS:		O Internal Rib Necrosis (Blackheart, Gray Rib, Grav O Brown Stain	r Streak)
COMMENTS:	OPINK Rib ORusset Spotting ORusty Brown Discoloration OR ELECTROPHORETIC MARKERS:		O Internal Rib Necrosis (Blackheart, Gray Rib, Grav O Brown Stain	/ Streak)
2. BIOCHEMICAL	OPINK Rib ORusset Spotting ORusty Brown Discoloration OR ELECTROPHORETIC MARKERS:		O Internal Rib Necrosis (Blackheart, Gray Rib, Grav	/ Streak)
COMMENTS:	OPINK Rib ORusset Spotting ORusty Brown Discoloration OR ELECTROPHORETIC MARKERS:		O Internal Rib Necrosis (Blackheart, Gray Rib, Grav O Brown Stain	-
2. BIOCHEMICAL	OPINK Rib ORusset Spotting ORusty Brown Discoloration OR ELECTROPHORETIC MARKERS:		O Internal Rib Necrosis (Blackheart, Gray Rib, Grav	/ Streak)

SUGGESTED CHECK VARIETIES

TYPE

- CUTTING/LEAF BUTTERHEAD BIBB

- 1) 2) 3) 4) 5) 6) 7) 8)
- COS, OR ROMAINE GREAT LAKES GROUP VANGUARD GROUP IMPERIAL GROUP EASTERN GROUP STEM

- 91
- 10) LATIN

CHECK VARIETY

SALAD BOWL DARK GREEN BOSTON BIBB PARRIS ISLAND GREAT LAKES 659-700 VANGUARD VIVA ITHACA CELTUCE MATCHLESS

Exhibit C: Objective Description of Variety

Lettuce: Coastal Star

Item 3 - Photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

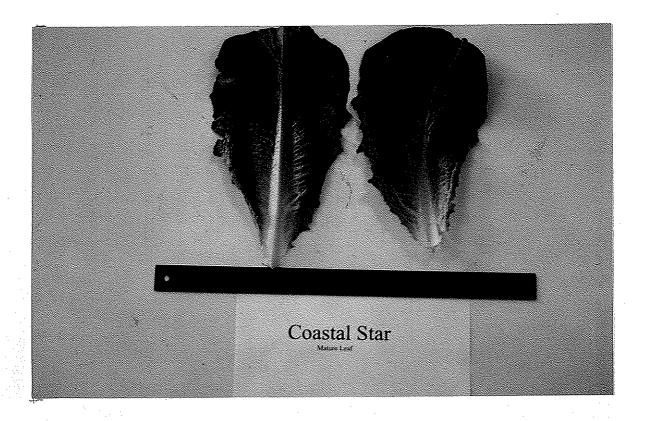


Coastal Star: Fourth True Leaf of 20 day Old Seedling

Exhibit C: Objective Description of Variety Lettuce: Coastal Star

Item 4 -**Mature Leaves**

Photograph of harvest-mature outer leaves showing color and margin characteristics.



PVP Trial #1 C & G

Variety Effects on Core Diameter

	Total		Coastal Star	Medallion	Darkland	
•	Count		96	96	96	
	Sum		3183	3232	3254	
	Average		33.15625	33.66667	33.89583	
	Variance		4.406908	6.37193	4.536404	
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Reps	123.5938	3	41.19792	9.757052	3.87E-06	2.637307
Varieties	27.52083	2	13.76042	3.25893	0.039913	3.028489
Interaction	165.9792	6	27.66319	6.551575	1.75E-06	2.1315
Within	1165.375	276	4.222373			
Total	1482.469	287				

Two way Comparison: Core Diameter

Coastal Star vs. Medallion

	Total		Coastal Star	Medallion		
•	Count		96	96		
	Sum		3183	3232		
	Average		33.15625	33.66667		
	Variance		4.406908	6.37193		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Reps	159.3073	3	53.10243	13.04737	9.17E-08	2.653692
Varieties	12.50521	1	12.50521	3.072553	0.08129	3.892495
Interaction	115.8073	3	38.60243	9.48469	7.39E-06	2.653692
Within	748.875	184	4.069973			
Total	1036.495	191				

Two way Comparison: Core Diameter

Coastal Star vs. Darkland

	Total		Coastal Star	Darkland		
	Count		96	96		
	Sum		3183	3254		
	Average		33.15625	33.89583		
	Variance		4.406908	4.536404		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Reps	35.51563	3	11.83854	2.940492	0.034484	2.653692
Varieties	26.25521	1	26.25521	6.521345	0.011469	3.892495
Interaction	73.30729	3	24.43576	6.069426	0.000582	2.653692
Within	740.7917	184	4.026042			
Total	875.8698	191				
Within	740.7917	184		6.069426	0.000582	2.653692

PVP Trial #2 D.J.Enterprises

Variety Effects on Core Diameter

Total	Coastal Star	Medallion	Darkland
Count	96	96	96
Sum	3591	3590	3504
Average	37.40625	37.39583	36.5
Variance	6.938487	9.420614	7.978947

ANOVA

ource of Variation	SS	df	MS	F	P-value F	crit
Reps	132.5382	3	44.1794	5.825971	0.000714 2.63730	7261
Varieties	51.96528	2	25.98264	3.42635	0.033894 3.02848	39459
Interaction	86.61806	6	14.43634	1.903731	0.080297 2.1315	50031
Within	2092.958	276	7.583182			
Total	2364.08	287				

Two way Comparison: Core Diameter

Coastal Star vs. Medallion

Total	Coastal Star	Medallion	
Count	96	96	
Sum	3591	3590	
Average	37.40625	37.39583	
Variance	6.938487	9.420614	

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Reps	129.5156	3	43.17188	5.64696	0.001008	2.653692377
Varieties	0.005208	1	0.005208	0.000681	0.979205	3.892495215
Interaction	17.89063	3	5.963542	0.780042	0.506481	2.653692377
Within	1406.708	184	7.645154			
Total	1554.12	191				

Two way Comparison: Core Diameter

Coastal Star vs. Darkland

Total	Coastal Star	Darkland	
Count	96	96	
Sum	3591	3504	
Average	37.40625	36.5	
Variance	6.938487	7.978947	

ANOVA

Source of Variation	SS	df	MS	F	P-value F crit
Reps	122.0156	3	40.67188	5.966019	0.000666 2.653692377
Varieties	39.42188	1	39.42188	5.782661	0.017177 3.892495215
Interaction	40.76563	3	13.58854	1.993257	0.116549 2.653692377
Within	1254.375	184	6.817255		
Total	1456.578	191			

Exhibit B: Coastal Star
PVP Trial #3 Pybas production field

Variety Effects on Seedstalk Height

		Total	Coastal Star Green Towers				
		Count		96	96		
		Sum		3890.5	3292.5		
		Average		129.6833	109.75		
		Variance		123.5945	126.5819		
	ANOVA						
Source	of Variation	SS	df	MS	F	P-value	F crit
	Reps	1940.208	2	970.1042	10.702960	0.000122	3.168246
	Varieties	5960.067	1	5960.067	66.75618	6.58E-11	4.01954
	Interaction	420.4083	2	210.2042	2.319139	0.108078	3.168246
	Within	4894.5	54	90.63889			
	Total	13215.18	59				

Exhibit B: Coastal Star
PVP Trial #3 Pybas production field

Variety Effects on Framespread

	7	- Total	Coastal Star Green Towers				
	7	Count		30	30		
	S	Sum		1230.5	1313		
	A	Average		41.01667	43.76667		
	7	/ariance		13.7842	12.32299		
ANOV	/A						
Source of Var	riation	SS	df	MS	F	P-value	F crit
Reps		117.0333	2	58.51667	5.070646	0.009592	3.168246
Variet	ies	113.4375	1	113.4375	9.829703	0.002777	4.01954
Interac	ction	16.9	2	8.45	0.732218	0.485554	3.168246
Within	ı	623.175	54	11.54028			
Total		870.5458	59				

TICI NODE CONTROL METADO TORM Manuer and trate on all reproductions.		FORM APPROVED - OMB NO. 0581-005
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The Tollowing Statements are mar	de in accordance with the Privacy Act of erwork Reduction Act (PRA) of 1995 .
STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to	o determine if a plant variety protection 2 2421). Information is held confidential
1. NAME OF APPLICANTIS) Beheer ENZA ZADEN, De Enkhuizer Zaadhandel BV.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
	Exp. R2776	Coastal Star
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Postbus 7, 1600 AA Enkhuizen	5. TELEPHONE (include area code) USA: 831 623-4644 NI: +31 228-315844	6. FAX (include sres code) USA: 831 623-1746 NL: +31 228-315854
Haling 1e, 1602 DB Enkhuizen The Netherlands	7. PVPO NUMBER	
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate b.		
	•	X YES NO
Is the applicant (individual or company) a U.S. national or U.S. based company If no, give name of country	?	YES X NO
10. Is the applicant the original owner? XYES NO If no, please ans	swer the following: he original owner(s) a U.S. nation	nal(s)?
YES NO If no, give name of country		
b. If original rights to variety were owned by a company, is the original	ginal owner(s) a U.S. based comp	pany?
YES NO If no, give name of country		
11. Additional explanation on ownership (If needed, use reverse for extra space):		
	•	-
PLEASE NOTE:		
Plant variety protection can be afforded only to owners (not licensees) who meet o	ne of the following criteria:	
1: If the rights to the variety are owned by the original breeder, that person must of a country which affords similar protection to nationals of the U.S. for the sar	he a LLS national national of a	UPOV member country, or national
If the rights to the variety are owned by the company which employed the originationals of a UPOV member country, or owned by nationals of a country which genus and species.	nal breeder(s), the company mus h affords similar protection to na	st be U.S. based, owned by ationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the original own	er and the applicant must meet	one of the above criteria.
The original breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company who directed final breeder/owner may be the individual or company while	eding. See Section 41(a)(2) of	the Plant Variety Protection Act

control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB

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ENZA ZADEN RESEARCH USA, INC.

Commercial Office: 7 Harris Place

Research Office:

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Tel: 831.754.2300 Fax: 831.754.2975

Tel: 831.623.4644 Fax: 831.6231746

To:

Robin Davis

PVP Office

NAL Building, Room 400 10301 Baltimore Avenue Beltsville, MD 20705

Date:

May 4, 2005

Subject: payments

Dear Robin Davis,

I've enclosed two checks:

Check #6618, \$190,- (5x\$38,-)

To change applicants name from Enza Zaden De Enkhuizer Zaadhandel B.V. to Enza Zaden Beheer B.V. for the following numbers:

- 1) PVP# 9900259 (Ponderosa)
- 2) PVP#200100226 (Coastal Star)
- 3) PVP#200200046 (Durango)
- 4) PVP#200300168 (Telluride)
- 5) Added: PVP#9900254 (Silverado)

Addresses, etc. remain the same.

Check #6577, \$432,-

payment certificate pvp# 9900259. I thought that we already sent this check but that was not the case.

If you have any questions, please do not hesitate to contact us.

Sincerely.

Aemoudt Aardse

Enza Zaden Research USA

Office: 831-623-4644 Fax: 831-623-1746 Mobile: 831-710-0605

Email: a.aardse@coastalseeds.com